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8 (amended). ^{isolated} A polynucleotide sequence encoding a polypeptide comprising an anti-CEA antibody ("806.077 Ab") comprising complementarity determining regions (CDRs) in which the CDRs comprise the following sequences:

A₃ a) heavy chain ^{most stable for CDR?}

CDR1 DNYMH (SEQ ID NO: 29)

CDR2 WIDPENGDT EYAPKFRG (SEQ ID NO: 31)

CDR3 LIYAGYLAMD Y (SEQ ID NO: 32); and

b) light chain

CDR1 SASSSVTYMH (SEQ ID NO: 26)

CDR2 STSNLAS (SEQ ID NO: 27)

CDR3 QQRSTYPLT (SEQ ID NO: 28)

9 (amended). A vector comprising a polynucleotide as defined in claim 8, 20, 21 or 22.

10. ^{isolated} A host cell transformed with a polynucleotide sequence as defined in claim 8 or a transgenic non-human animal or transgenic plant developed from the host cell.

14 (amended). A method of making an antibody as defined in claim 8 which comprises:

A₅ subjecting a transgenic non-human mammal or a transgenic plant as defined in claim 10 to conditions conducive to expression of the antibody.

16 (new). A polynucleotide sequence encoding a polypeptide comprising an antibody conjugate comprising an antibody as defined in claim 8 and an effector moiety.

P₆ 17 (new). A vector comprising a polynucleotide sequence as defined in claim 16.

18(new). A host cell transformed with a polynucleotide sequence as defined in claim 16 or a transgenic non-human animal or transgenic plant developed from the host cell.

19(new). A method of making a conjugate as defined in claim 16, which comprises:
subjecting a host cell, a transgenic non-human mammal or a transgenic plant as defined in claim 18 to conditions conducive to expression of the antibody conjugate.

20(new). A polynucleotide sequence encoding a polypeptide comprising an antibody as defined in claim 8, wherein the heavy chain CDRs 1 and 3 are further defined as:

CDR1 FNIKDNYMH (SEQ ID NO: 30); and
CDR3 HVLIYAGYLA MDY (SEQ ID NO: 33).

21(new). A polynucleotide sequence encoding a polypeptide comprising an antibody as defined in claim 8, said antibody comprising the following, optionally humanized, structure:

a heavy chain variable region sequence (SEQ ID NO:11)

EVQLQQSGAE LVRSGASVKL SCTASGFNIK DNYMHWVKQR	40
PEQGLEWIAW IDPENGDT EY APKFRGKATL TADSSSNTAY	80
LHLSSLTSED TAVYYCHVLI YAGYLAMDYW GQGTSVAVSS	120

and

a light chain variable region sequence (SEQ ID NO:9)

DIELTQSPAI MSASPGEKVT ITCSASSSVT YMHWFQQKPG	40
TSPKLWIYST SNLASGVPAR FSGSGSGTSY SLTISRMEAE	80
DAATYYCQQR STYPLTFGAG TKLELKRA	108